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THE GENESEE FARMER.

SATURDAY, JUNE 23, 1838.

Salt as a Manure.

Few instances have come to our knowledge in this country, where salt has been made use of as a manure; yet from the common and extensive use made of it in England and some parts of the continent, it would seem deserving of more notice than it has yet received. We hope, by alluding to it at this time, to induce our farmers to make some experiments with this substance, since should it realize the benefits ascribed to it by foreign writers, a new source of fertilizing our soils would be opened to us, and the salt springs of this state assume a new and greatly augmented value.

Like all mineral manures, salt acts as a stimulus to plants; like lime it possesses no direct nutritive properties; and though sometimes present in plants in small quantities, it does not seem to be taken up as food, or to enter into combination with the substance of the vegetable. It appears perfectly rational therefore, that its effects will be very different on different soils, and may be indefinitely varied by the quantity applied. Like all mineral manures, also, too large quantities are fatal to vegetation; and the same substance that in proper proportion would be felt beneficially, if applied too liberally would entirely destroy. The stimulus becomes a poison, a fact that is not without a parallel in the effects of stimulus in the animal kingdom.

For the best account of the action of salt as a manure, we are indebted to the prize essay of Mr. Sinclair, presented to the English Board of Agriculture. Mr. Sinclair in that paper details a great variety of experiments made to ascertain the comparative value of salt, lime, soot, dung, and oil cake, and it abounds with curious and important information. His experiments on wheat will show its efficacy in field culture.

Wheat after Barley.

Soil, without manure,	produced	16½ bush. per acre.
—, dressed with 11 bush. salt,	"	22½ " "

Wheat after Flax.

Soil, with 11½ tons spit manure,	produced	16½ bush. per acre.
—, with 6½ bush. salt,	"	23½ " "

Wheat after Beans.

Soil, without manure,	produced	11½ bush. per acre.
—, with 6½ bush. salt,	"	21 " "

Wheat after Peas.

Soil, without manure,	produced	16 bush. per acre.
—, with 6½ bush. of salt with seed,	"	17½ " "
—, " " dug in with the seed,	"	23½ " "
—, 6½ bu. salt, and 6½ bu. soot, dug in,		20 " "

Barley after Turneps.

Soil, without manure,	produced	12 bush. per acre.
—, with 5½ bu. salt before sowing,	"	28½ " "
—, with 11 " "	"	28½ " "

Mr. Sinclair also records experiments made on spaces of 36 feet square, rich soil, with salt at the rate of 5½ bushels per acre, sown with *Talavera wheat* on the 5th of November, and reaped on the 2d of August, which respectively produced at the rate of 91, 73 and 82 bushels per acre. In the first instance, the salt was mixed with the soil 4 inches deep, before the wheat was sown; in the second, put in with the seed: and in the third, simply applied to the surface.

Mr. Cuthbert Johnson, a farmer of Essex, in his work on the employment of Salt as a Manure, states the result of some experiments on his own farm to be as follows:

Soil, without any manure for 4 yrs,	13 bu. 26 lbs. per acre.	
—, manured with dung to a previous crop of potatoes,	26 " 52 "	"
—, with 5 bush. of salt per acre, and no other manure for 4 years,	26 " 12 "	"

The British agricultural publications contain great numbers of reports, in which the increase of the wheat crop was from six to eight bushels per acre; and some in a far greater proportion. Of its effects on barley, we give one instance from the report of Mr. Ransom, in Suffolk:

Soil, without manure, produced 30 bushels per acre.		
—, dressed with 16 bushels of salt in March,	51 "	"

All these writers agree that the grain from salted land is heavier, of a plumper kernel, and of a decidedly better quality for flouring.

The application of salt to *root crops* produced good effects, as may be seen from reports of experiments made by Messrs. Collins, Johnson, Ackland and Hare, particularly on turneps, carrots and potatoes. In one experiment made by Mr. Sinclair, the result was as follows:

Carrots, without manure,	23 tons 9 cwt. 107 lbs. per acre.	
13½ bush. salt mixed with seed,	30 " 12 " 79 "	"
6½ " " dug in "	44 " 14 " 17 "	"
13½ " " " "	31 " 13 " 40 "	"
6½ " and 6½ soot dug in,	40 " 4 " 97 "	"

In the experiments of Dr. Cartright upon potatoes, the soil was a ferruginous sand, brought to a due texture and consistence by a liberal covering of pond mud, the yield was as follows:

Potatoes, without any manure,	157 bush. per acre.	
———, with 9 bush of salt per acre,	198 "	"
———, with 8 do. and 30 bu. of soot,	240 "	"
———, with 30 bush. of soot per acre,	182 "	"

Mr. Cuthbert Johnson's experiments with potatoes on a light gravelly soil gave:

Potatoes, without manure,	120 bush. per acre.	
———, 20 bush. of salt put on in Sept. previous,	192 "	"
———, stable manure,	219 "	"
———, do. and 20 bushels of salt,	234 "	"
———, 40 bushels salt, half at the time of planting, and half the previous Sept. with stable manure,	244 "	"

According to the testimonies of the different British and foreign writers, from 5 to 15 bushels of salt per acre is as much as can be safely used, if applied to the soil with the seed, or as a dressing.

"In Dacre's 'Testimonies,' containing a voluminous mass of facts adduced in favor of the use of salt for agricultural purposes, it is said, that although the fertilizing properties of salt, when used by itself as a manure, are very great, it yet requires discretion to guard against putting on too much: a few bushels to an acre are sufficient. If any large quantity be put on, it will by its pungency destroy vegetation for a time; but afterwards, when the salt is well dissolved in the soil, the land becomes very rich.—When mixed with dung and other manure it is very efficacious; but the safest way of using it, is to sprinkle it occasionally over the dung in the cattle yard, that it may amalgamate with it and ferment. The effects on the continent, as described by that eminent agriculturist Von Thaer, appear to be similar to those we have stated. When applied in *large* quantities, vegetation seems entirely stopped; but when the salt has been washed in by the rain, and partly decomposed by the mould, it adds to its force during several years. On rich land, when spread in *small* quantities, it produces very sensibly favorable effects, though of short duration; put on poor land in the same quantity, and it has been found wholly ineffectual."

For further remarks on the use and application of salt, see British Husbandry; Von Thaer's Principles of Agriculture; and the Edinburg Qutarterly Journal of Agriculture.

Though some recorded experiments may go against the use of salt as a manure, yet the great mass are clearly in its favor; and we think our farmers in this country would be wise in experimenting with it, cautiously perhaps at first, till they had made themselves familiar with its power, and the best methods of application. If any have already tried it, we should be happy in laying the results before the public, as every thing relating to manures must always possess a paramount interest with the farmer.

CATTLE---No. 2---Devonshire.

While it may be affirmed with great truth, that the present beautiful and superior breed of Improved Short Horns are strictly artificial, and while some fears may be justly entertained lest the valuable qualities for which they are so distinguished, have not become so fully constitutional as to be beyond the possibility of lapse,—we here bring to the notice of the farmer, a breed of cattle, scarcely inferior in any quality to the Short Horns, and of which no apprehensions can be entertained that the type of these distinguishing qualities are evanescent, and not durably incorporated in the constitution and race.

The north of Devon has long been celebrated for a beautiful breed of cattle, in activity of work, and aptitude to fatten, unrivaled. The place where they are found in the greatest perfection, is in the vicinity of Portlock and Bidleford, along the Bristol channel in the county of Devon. From the earliest records the breed has here remained the same, or if not quite as perfect in general as at the present moment, yet altered in no essential point until the last thirty years. No persevering or successful attempts to improve the general character of British cattle were made until within some fifty or sixty years; and the Devonshire farmers were so well satisfied with their herds that they were about the last to dream that their beautiful red cattle could be improved, and they did not bestir themselves in earnest until the high prices and improved forms of the Collings Short Horns, convinced them that in estimating their advantages they were behind the age.

The most perfect specimens of the Devonshire cattle are found among the North Devons, and it is of these we shall speak. As the breed is of the middle horns, the horns should be neither too high or too low, those of the *bull* tapering to the points, not very thick at the base, and of a yellow or waxen color. The eye should be clear, bright and prominent, showing much of the white, and it ought to have a circle of a variable color, but usually of a dark orange, around it. The forehead should be flat, indented and small, for by the smallness of the forehead the purity of the blood is much estimated. The cheek should be small and the muzzle fine, and the nose should be of a clear yellow. The *ox* has a small head, singularly so relatively to the bulk of the animal, yet it has a striking breadth of forehead. Its neck is well adapted to the yoke or the collar; the horns are small and fine; the forelegs are wide apart, looking like pillars to support a great weight. Angular bony projections are never found in a beast that carries much flesh and fat. A narrow chested animal can never be useful either for working or grazing.

The skin of the Devon of the pure breed, notwithstanding his curly hair, is very mellow, fine and elastic. Graziers know there is not a more important point than this. When the skin can be easily raised from the hips it shows that there is room to set on fat below. The favorite color of the Devons is a blood red. The hair in some is curled, the curls running like ripples on water, and when dark giving a mahogany appearance. If the hair is smooth it should be fine and glossy. Few of good blood have any white upon them, and the pure Devon is as uniformly red, as is the pure Short Horn red and white.

The comparative smallness of the Devon cow, is one of the most remarkable traits of their character. The bull is much smaller than the ox, and the cow proportionably smaller than either. This is considered somewhat of a disadvantage, as it is almost impossible to procure large and serviceable oxen, except from a *roomy* cow. Owing to their peculiar build, however, the Devon cow is more *roomy* than most other breeds of cattle of the same size, which in a great measure obviates the objection. The Devon cow is particularly distinguished for her full, round, clear eye, the gold colored circle around it, and the same color prevailing on the inside of the ear. The muzzle orange or yellow, but the rest of the face having nothing of black, or even of white about it.

The peculiar excellence of the Devonshire ox, is a quickness of action in working, which few horses exceed, and no other cattle can equal. They have also a degree of docility and goodness of temper, and stoutness and honesty of work, to which many teams of horses cannot pretend. Mr. Youatt, who is great authority on the subject of cattle, thus describes their usual mode of treatment and aptitude to fatten.

The Devon steer is taken into work at about two years old; and they are worked until they are four, or five, or six; they are then grazed, or kept on hay, and in ten or twelve months, and without any further trouble, they are fit for market. If the grass is good, no corn, or cake, or turneps, are required for the first winter; but of course for a second winter these must be added. The grazier likes this breed best, at five years old, and they will usually, when taken from the plough, fetch as much money as at six. Lord Somerville states, that after having been werked lightly on hill land for two years, at four years old they are brought into the heavy land of the vales, and used in hard work till six; and what deserves consideration is, an ox must be thus worked to attain his largest size. If he is kept idle until he is five or six, he will invaribly be stinted in his growth. Mr. Youatt, adds—In their disposition to fatten, very few cattle can rival them. They do not, indeed, attain the great weight of some breeds; but in a given time they acquire more flesh and with a less consumption of food, and their flesh is beautiful in its kind. It is of that mottled, marbled character so pleasing to the eye, and to the taste.

As to the value of the Devon cow for the dairy, different and somewhat conflicting opinions are entertained in England. Mr. Youatt says:

"For the dairy, the North Devon must be acknowledged to be inferior to several other breeds. The milk is good, and yields more than an average proportion of cream and butter; but it is deficient in quantity. There are those, however, and no mean judges, who deny this, and select the North Devons even for the dairy."

Perhaps one of the most valuable crosses that has yet been made, is the one described by the celebrated breeder, Mr. Bolton, in a letter to the Farmer's Magazine.

"I have known many excellent beasts bred from improved Short Horn bulls and long horn cows; indeed I never knew one of these bulls put to any cow where the produce was not superior to the dam; but the cross which I advocate, and with which I am best acquainted, is that with the *Devon cow*. I have uniformly remarked that a cross here was attended with a proportionate improvement in size, quality of flesh, and aptitude to fatten. In every instance they have shown themselves superior milkers, and stand to the pail till within six or eight weeks of calving; and several instances have come under my knowledge, where they have never been dry since they first calved. So highly are they prized as milkers, that a friend of mine who hires out dairies, informs me, that the dairymen give him nearly 2*l*. per cow per year more for the half and three-fourth breeds, than they would for cows of any other breed."

Judging from the expressions of opinion given by cattle breeders in England, by the course of the agricultural periodicals of that country, and by the fact, that at the late Smithfield cattle show, open to the whole Kingdom, the first prizes were taken by Devon cattle, we should imagine that since the demise of some of the most celebrated Short Horn breeders, such as Collings, Berry, and others, the Devons were treading close on the heels of the Short Horns in public estimation. The first premium was given at the late Smithfield fair, to a pure Devon, the property of Mr. Coke of Holkham, and the second to a steer only 19 months old, of the improved Devon, or the Devon crossed with the Somersetshire breed. The ox weighed when dead, 1122 pounds; and the steer when dead, weighed 1332 pounds. The steer was a most remarkable one, and was owned by Mr. Giblett.

The Devonshise breed of cattle have been more extensively introduced into the United States than any other breed of foreign cattle, and they form a large portion, in different grades, of the cattle of New England and the the middle states. Some fine stock of this breed were sent from Mr. Coke to Mr. Patterson of Baltimore, and two oxen from this importation, raised and fattened by the Messrs. Hurlbuts of Winchester, Connecticut, weighed when killed as follows:

First Ox.		*Second Ox.*	
Carcass....	1438.	Carcass.....	1528.
Hide.....	117.	Hide.....	115.
Tallow.....	175.	Tallow....	213.
	1730 lbs.		1856 lbs.

Mr. Fisher of New-York, addressed a letter to Mr. Coke, giving an account of these cattle, and received the follow-reply from that veteran agriculturist, which we insert as showing his opinion of the Devons.

Holkham, April 21, 1831.

Sir,—I am this moment favored with your kind letter, and most flattering account of the Devon oxen. It is a pleasing reflection to me, that I was the first person that introduced them into America, through my friend Mr. Patterson. I thought them at that time, and I am still more confirmed in my opinion now, that they are the most superior breed of cattle in the Island, if well selected. But I beg to be understood, when I speak of the Devonshire red cattle, it is in praise of the *North Devon cattle*, with yellow noses and indented foreheads, and yellow around their eyes, which mark their character beyond that of the South Devons, which have black noses, or intermixed with black. These I beg to be distinctly understood not to recommend as a superior breed of cattle. Be so kind as to express my acknowledgment to Mr. Hurlbut, when you see him, and to assure him that I shall be at all times most happy to show him, or any of his American friends, should they come to England, every attention in my power, in the Agricultural line. Tho. Wm. Coke.

Mr. Colman in his late Agricultural report to the Massachusetts Legislature, says:—"Essex Co. is not a grazing territory. Few cattle are raised in it. The stock generally found in it is what is called our 'Native Stock,' which is a mixture of no certain origin; but in which the Devon race greatly preponderates." Some of this mixed breed in New England have been excellent for the dairy, few of the best imported stock ranging higher. Mr. Colman notices some of these. One of these, the Oakes cow, owned in Danvers, gave in 1814, 300 lbs. of butter, 1815, over 400 lbs. and in 1816, 484 lbs. At the same time, the family reserved one quart of milk per day for their own use; and she suckled three calves, four weeks each in the course of those years. The Nourse cow owned in Salem made 20 lbs. of Butter in one week, and averaged 16 lbs of butter per week for 3 months in succession. A number of others are mentioned in the Report that made from 12 to 18 lbs. weekly; and it may in general be remarked, that wherever the Devon blood is found in the country, the mixture is marked by color, goodness of milking, and ease in fattening.

"In England the Devon cow is greatly esteemed for raising calves, as she gives the richest, of milk; and the calves thrive rapidly. The Devon cow too is noted for producing the best *clouted cream*, which is so peculiar to the west of England. The milk is suffered to stand in a bell-metal vessel four and twenty hours; it is then placed over a small wood fire, so that it shall heat very gradually. After it has been over the fire about an hour and a half, and is approaching the state of *simmering*, the vessel is struck every now and then with the knuckle or very carefully watched. As soon as it ceases to ring, or the first bubble appears, a slight agitation or simmering previous to boiling has commenced, and the secret of the preparation is, that the simmering shall not proceed to boiling. The milk is immediately removed from the fire, and set for 24 hours more. At the end of this time all the cream will have arisen, and be thick enough to cut with a knife. It is then carefully skimmed off. Such cream is a great luxury with coffee or with tarts, and strawberries and clouted cream need no praise."—(*British Cattle.*)

Much has been written on the subject of breeding cattle, but we are convinced the only correct theory can be given in a single line, and that is to "*suit the breed to the soil and climate.*' To think of raising a breed of large heavy cattle, for such must be great feeders, on a poor, cold, or elevated part of any country, would be an entire mistake. Experience has shown this to be the case in England, and such will unquestionably be the case here. All efforts to introduce the Short Horns of the improved kinds into the Highlands of Scotland have proved a total failure; the small hardy cattle of the country it is found will thrive and grow fat, where a Short Horn will starve, and the case is not widely different with the Devons, though this breed are more hardy, and of course rather more patient of change of climate and pasture, than the improved heavy Short Horns. Keeping, which is a luxury to the parent and may be used or not as circumstances require, becomes necessary to the progeny, or there will be a falling off; and a breed of animals cannot be taken from rich pastures and transplanted to a region where they must keep busy to get a living, without speedy deterioration.

There are parts of our country to which, in our opinion, the improved breeds of imported cattle will not be found adapted. Because these cattle flourish and even improve in the rich vallies and prairies of the south and west, of Kentucky, Ohio, Indiana and Illinois, and can be advantageously grown in most parts of this state, we should not think it fair to infer that they would succeed on the sweet but *short* pastures of the hilly regions of this state and New England, or that their large frames and thin skins are as well adapted to resist the inclemencies of our winters as a more compact and less delicate breed. In improving our stocks, climate and keeping should not be lost sight of; for in the United States, as elsewhere, there are sections where the native breeds will thrive and afford a profit, where the high fed and artificial breeds would suffer, and by their failure bring undeserved odium on the cattle and those who have labored for their introduction to the country.

THE GEOLOGICAL REPORTS.

Lardner Vanuxem, Geologist of the Third District, chiefly confined his examinations during the past season, to the counties of Montgomery, Herkimer, Oneida, and Oswego. The truths contained in the following paragraph, have been long known to us, but they are important to all who may undertake systematically to examine our rocks. The italicising is ours:

"The series of rock which forms the third district, from the Pennsylvania line to the primary elevated region which separates the waters of the Hudson from those of the St. Lawrence, inclines at a small angle to the southwest, giving rise to that all-important practical consequence and fact, that *every change of rock going north from the Pennsylvania line to the limits mentioned brings us to a* LOWER *and an* OLDER ROCK; and on the contrary, *every new or different rock we arrive at going south, carries us higher in the series, or nearer to the newest*, the *coal of Pennsylvania*, the final member of the great consecutive series of rocks of our portion of the North American continent."

It appears from the Report, that the valley of the Mohawk in this district, forms an important geological line. No less than five series of rocks, terminating more or less abruptly, form the hills on the south side,—while the northern side is generally formed of the inclined surfaces of the rocks which continued, pass under the channel of the river, and underlay the former series. These rocks, which present nothing in common with the visible strata on the south side,—are black shale, the Trenton limestone, the birdseye limestone, the calciferous sand rock, and gneiss. This order of arrangement is preserved throughout: the black shale invariably uppermost, and the gneiss invariably lowest.*

Across this valley however, there exists a series of parallel *uplifts*, the work of primeval earthquakes, which may form exceptions to the general truth of the preceding paragraph; but they extend but a short distance south of the river. Their general direction is north and south. Prof. V. also observes that in the valley of the Mohawk at these places, some of the lower strata are invariably thrust or protruded through the black shale; and at the Little Falls and the Noses, even the gneiss has been forced upward, and occupies the whole surface.

It is a curious circumstance that the eastern edges of the uplifts rise like a wall, while the western sides slope off and become more or less horizontal. Prof. V. extends this remark to all the great uplifts of the globe.

He also thinks he has conclusive proof that these uplifts were made after the original valley of the Mohawk from near Rome to the Hudson river, was scooped from the black shale. The whole evidence bearing on this point is not given; but admitting its correctness, we may easily account for the "Pot-holes" in the rocks at the Little Falls which are far above the reach of any flood collected in that channel in modern times. Some persons however, may be inclined to account for their elevated position by the wearing down of the rocks.

Prof. V. says that all the quarries along the Mohawk either for lime or for building stone, owe their origin [or position] to these uplifts; and from the knowledge now acquired, it will be easy when these localities are exhausted, to discover others.

The discoveries of lead ore at various places, also appear to be owing to these uplifts; but he remarks that all he has visited will add more to *knowledge* than *pecuniary profit*.

"At Middleville," he remarks, "we have the locality, where rock or quartz crystals, and anthracite coal are most abundant; the latter however, not in quantity more than required for cabinet specimens. No locality, probably, in the world, produces more numerous, perfect, or more beautiful rock crystals, than Middleville. With an equal refractive power, they would more than rival the diamond."

Some years ago it was believed that all the gypsum of this region was confined to the calciferous slate; but though generally true, it appears not without exceptions. We learn from the Report, that in the town of Starke an irregular roundish mass of gypsum was met with in white sandstone, so far as Prof. V. could judge at the time, and twen-

* For the reason given in a former paper, we omit the marks of quotation where we use only a sentence or parts of a sentence.

ty or thirty tons were obtained; and we have now in our possession, a fine specimen of gypsum taken from the deep salt well at Montezuma, which is stained with ochre, the common coloring matter of the red sandstone.

It appears that an adit of 430 feet in length, was excavated at a cost of about $3000, in search of *silver;* and the promptings were the ochrey stainings of calcareous tufa, ferruginous waters, and above all the *divining rod!* A number of small cavities lined with crystals of sulphate of strontian also encouraged them in the progress of the work; and this, says Prof. V., is no bad exemplification of mining operations commenced without appropriate or requisite knowledge.

In this place we may also introduce some remarks of Professor Mather's.

"Too many are still believers in the *mineral rod*, and suffer themselves to be duped by the designing; but there are some who *use* the mineral rod and are ignorant of the cause of its motion, who firmly believe in its virtues. It is time that this faith in the mineral rod should be exploded."

But superstitions like weeds, grow best where there is but little culture.

"It is from the water limestone," says Prof. V., "and from the limestone which rests upon it, that the calcareous tufa which is found in every valley or ravine that extends to the water limestone, owes its origin. These deposits of tufa, when practical attention shall be given by the farmers to the improvement of soil by the use of lime, will from their great abundance, purity and ease of access, have that value given to them which they justly merit.

"On Frankfort Creek, above the upper furnace, there is a deposit of tufa in hard or tough, though thin layers. It is burnt for lime and carried to Utica. It makes *the whitest lime* I have yet seen in the state."

A red iron ore, confined to the Saliferous Rock, occurs in Herkimer and Oneida, and we believe as far west as Wayne county. It appears from the Report that the number of beds, one above another, vary from local causes, and in some places as many as three, have been found. Prof. V. fully satisfied himself that if the surface over which the iron flowed at the time of its deposition, was *permeable*, it was absorbed and gave color to the rock below; but on the contrary, if the surface was *impermeable*, a bed of ore was the result. This ore is in concretions, either resembling the roe of fish, or small elongated sugar plums; and the beds vary from one to two feet in thickness. It appears that these beds chiefly occur in the vicinity of green sandstone or green shale, these masses having been too compact to admit the coloring matter.

To one opinion, adopted in the Report, we must take the liberty to demur; and it is that "the primary cause of the depopulation of every country on the globe, has been a *worn out soil*." We think it will scarcely be pretended that the ancient race that once possessed this region and the boundless plains of the west, disappeared from this cause; for we trust it would be easy to show from the composition of the soil throughout no inconsiderable part, that it never has been, and never can be worn out. We might also inquire if Babylonia or the Holy Land when the cities were left without an inhabitant, was depopulated in consequence of the soil becoming worn out? Those countries even now, would yield immense harvests, were it not for oppression—inadequate compensation to the laborer and insecurity of person and property. On the contrary, when the reward of labor is equitable and secure, though heavy taxes be levied, there is encouragement for the industrious; and under such influence the once blowing sands of Belgium, perhaps as barren as any worn out soil, have acquired the fertility of a garden. T.

[The article on this subject in our last, should have had the letter T. attached to it.]

WEEDING WHEAT.

By always persevering in proper efforts to procure and preserve clean seed wheat, it may be finally entirely freed from foul matter, as cockle, chess, &c.; and it will greatly contribute to this object, if such parts of wheat fields as are intended for seed, are carefully and thoroughly weeded at the present season. *Rye*, in wheat fields, is now more easily extirpated than at any other time, as its scattered heads stand conspicuously above the wheat. *Cockle*, which has escaped previous weedings, may be finally and completely cleared at the time of its flowering, when it is very readily distinguished by its large red flowers. *The field mustard* is a very pernicious weed, and no pains should be spared to extirpate it from all wheat fields, especially those for seed; and it is now at once perceived by its bright yellow flowers. But above all, no efforts should be neglected to remove completely every stalk of chess—every means of destroying this weed should be brought into requisition, for it is only by constant and persevering efforts that wheat can be thoroughly cleaned of it. J. J. T.

WIRE WORM.

We are sorry to learn from various sources, that this insect, the larvae of the Eleater segetis, a small snapping bug, as insects of this class are usually called, is inflicting serious damage in some sections of the country on spring sown grain, particularly spring wheat and barley. The ravages of the wire worm have been heretofore mostly confined to corn, but if it should continue to increase its numbers for a few years to come, as it has for a few years past, it would almost rival the grain worm as an enemy to the grain grower. Some farmers have attributed the injury to other insects, but examination we think will convince them, as it has us, that the wire worm alone is the cause of the disappearance of the young grain, the shoot of which is eaten off just below the surface.

The identity of many of our insects that prey on the labors of the husbandman here, with those that go by the same name in Europe, may well be questioned; but a microscopical examination shows that in the number of segments, legs, and the indented black spots near the hinder extremity, as well as in the general appearance and habits, there is a perfect resemblance with the insect described by Wilson and others, under the above name, and consequently any mode which has been useful there will be beneficial here, and what has failed there will do little good here. As yet, late ploughing, by exposing the larvae to frosts, has proved the most effectual method of reducing their numbers, in cultivated land.

WHITEWASHING.

The present time is well adapted for this operation, and independently of the appearance of neatness which it imparts to fences and out-buildings, it possesses another advantage—it greatly contributes to their durability. But this advantage is often but imperfectly attained, from the circumstance that it is not often repeated. They should be whitewashed at least once a year for several successive seasons, when they will receive such a firm and adhesive coating, as to remain entirely unaffected by rains.

Many farmers resort to the practice of painting their fences in the vicinity of their dwellings with oil and white lead; but in consequence of the greatly increased expense, as well as the additional labor of planing and smoothing the material, they cannot afford to extend them but few rods on each side of the house. Hence we often see handsome white dwellings with green Venetian blinds, and a small door-yard with a neat white fence, but with the remainder of the domain on each side encumbered with a black, broken down, unsightly worm fence. Far better would it be to apply the same expenditure in the construction of more extended neat rough board fences, to be thoroughly whitewashed. One other remark should be here made for the consideration of those who wish to ornament the vicinity of their residences, that neatly constructed fences with horizontal rails, provided the boards constituting these rails are not broad, present a much better landscape effect than a pale or picket fence, or one constructed with upright pieces.

Various expedients have been resorted to to render lime adhesive and durable for out-door work. One of the most common is mixing it with milk, and sometimes with a small quantity of the white of eggs. But little advantage is commonly derived from these modes. Good lime merely mixed with water, well applied in successive coats, is commonly found to remain as well after a lapse of years as any other of its preparations. By exposure to air and weather it becomes hardened and is rendered more durable than within doors. The application of *water-lime* for whitewashing deserves trial; many years since a number of preparations of lime were applied in small patches to the outside of a building; among them were mixtures of lime and water merely, lime, water, and milk, and the same with the addition of the white of eggs. A mixture of *water-lime* was also applied. The result was that after the lapse of seven or eight years all the preparations were completely washed off, except that of the water-lime, which remained nearly as at the beginning.

Lime used for whitewashing the inside of rooms, is rendered much more adhesive, and thus prevented from rubbing off on the hands, clothes, &c. by mixing a small quantity of salt with it, or still better by a small portion of glue. The efficacy of either of these substances may be tried and ascertained in a few minutes by a limited experiment. J. J. T.

Extension of the Root Culture.

There are few things in the history of American Agriculture, that speak more decidedly for our advance in the improved methods of Husbandry, or for the advantages of diffusing valuable information by means of journals devoted to agriculture, than the rapid increase making in the quantity of roots annually produced for the use of the farmer. There are probably at this time many single counties in this state and Pennsylvania, that grow more roots for domestic purposes and feeding to cattle, than were grown in the whole United States ten years since, for this purpose. To show the change which has taken place in the practice and opinions of farmers in this part of the state, we give the following statement of the sales made by Reynolds & Bateham, the worthy proprietors of the Rochester Seed Store, the present season; and we have no reason to suppose that a nearly corresponding increase has not taken place with other dealers in different parts of the state and country. There can be no doubt of the favorable effect which the extension of the root culture will have on the interest and prosperity of our farmers, and we are therefore disposed to hail with pleasure all such incontrovertible evidence of this fact.

Three years since, these same gentlemen sold about five hundred pounds of root seeds, all varieties included. Their sales this year are as follows:

Ruta Baga,	1,600 lbs.
Other Turneps,	1,200 "
Mangold Wurtzel,	500 "
Sugar Beet,	300 "
Carrots,	300 "

Or about four thousand pounds in the whole. We must be permitted to say, that this increase speaks well for the quality of the seeds sold at the Rochester Seed Establishment.

Sugar from the Pumpkin.

"It is said that Pumpkins contain more sugar than the beet; can you afford any information on the subject, and on the process of making it?" G. McC."

We are aware that molasses has been made from the pumpkin, as from the apple, but we believe that no one has as yet obtained sugar from either. Whether chemistry will succeed in obviating the difficulties in the way of crystalizing these substances, as it has in the case of the beet root, remains to be seen. If molasses in all cases could be converted into sugar, in all probability the potato would be found a better substitute for the sugar cane than the beet, apple or pumpkin; as the quantity produced from a bushel in the extensive experiments of Mr. Guthrie proved that molasses to any desirable extent could be readily produced. But neither this gentleman or Prof. Silliman, were successful in converting the molasses into sugar. All substances that will produce starch, can be made to afford sweets; but science has not yet been able to effect crystalization in all cases. Other substances, as the sap or juice of the cane, maple, apple, beet, and pumpkin, contain the sweets already developed, but except in the case of the two first, combined with native principles that render the formation of sugar a difficult if not an impracticable operation.

The process of making molasses from the pumpkin, is

not very different from that of preparing apple molasses; the pumpkins may be grated and the juice expressed, and then boiled down; or the pumpkin may be sliced and boiled in a sufficient quantity of water to extract the sweet, and then be separated from the pulp by straining. We have never seen or used pumpkin molasses, and should have much more faith in the apple as a source of supply. We have a quantity of molasses made from sweet apples three years since, which retains all its good qualities in perfection, and for many of the processes of domestic cookery, it is considered superior to the best New Orleans or Matanzas. We have no doubt that the settlers of the rich vallies of the west, if they choose, can manufacture from the pumpkin an article that would prove no despisable substitute for the imported sweets, and at a much cheaper rate, even should crystalization be impracticable.

INDIAN PUDDING.

A most excellent Indian pudding is made as follows:—Take one quart of corn meal, two quarts of warm milk, (about blood heat,) two teaspoonfuls of salt, one tea-cup of molasses (or four table-spoonfuls of sugar,) one table spoon of chopped suet, and half a grated nutmeg. Bake this mixture in a pan two hours.

Another, equally excellent, is thus made:—Take 14 table-spoons of Indian meal, two quarts of *boiling* milk, two tea-spoons of salt, and half a table spoon of chopped suet. A richer pudding is made by substituting for the fourteen table-spoons of Indian meal, seven eggs and seven table-spoons of meal.

The Sauce consists of one pint of water, four table-spoons of sugar, butter the size of half an egg, one table-spoonful of vinegar, one table-spoon of flour, and the quarter of a nutmeg;—boiled three or four minutes.

These were furnished us by a lady whose skill in preparing good dishes is a sufficient guaranty of their excellence. J. J. T.

SCARE-CROWS.

Those singular and ludicrous objects which Halleck describee,

"That stand full uniformed upon the plain,
"To frighten flocks of crows and blackbirds from the grain,"

are probably of Yankee invention, and to the European traveler they doubtless present novel objects in American landscape scenery. But although the inventor deserves great praise for the ingenuity he displayed, and we wish to accord to him all the honor that is due,—the day for t' eir use has passed—the necessity that prompted their contrivance has ceased to exist. Their *efficacy* is doubtful at best, as are most of the scare-crow family, whether they be military statues in "Iberian boot and Spanish plume," or sturdy men of straw, in torn and obsolete vestments. At all events, we have found a remedy for the evil against which their terrors are brought to bear, which years of trial have proved completely effectual; and though out of season for use at this time, we hope the recent losses and disappointments occasioned by the depredations of the "black rogues," as an eminent naturalist terms them, will cause some of our farmers to remember and apply it by another season, and their skill in this kind of statuary be no more brought into requisition.

This remedy is an old one, though not often applied. It is tarring the seed. The usual way of doing this is to heat the tar in an iron pot or kettle, and by stirring the corn with it when heated, coat every grain so that the birds will not touch it. Plaster or air slacked lime is afterwards stirred with it, to prevent its sticking to the fingers while dropping. This is the usual way. But there is a greatly improved method of applying the tar by which the quantity required is much less, and the whole surface of every seed is completely and evenly coated, while in the former it is but partially covered, and some of it, unless performed with great care, not at all. The improved method is this:—Hot water is poured upon the seed corn and suffered to remain long enough to heat it, which is but a few seconds; it is then poured off; the warm tar is poured upon the seed and immediately and thoroughly stirred. Every grain thus receives a uniform and equal coating, the thickness depending on the proportionate quantity of tar applied. It is then stirred with lime or plaster as before. It would probably be very difficult to persuade crows and blackbirds to swallow seed thus prepared; at all events they are never known to touch it. J. J. T.

Improvement of Stock.

We are much gratified to perceive that public spirited individuals in different parts of the Western district, are putting it into the power of farmers to improve the breeds of our horses, cattle, sheep, and swine; and it is to be hoped that the desire of bettering our breeds of animals, will afford a sufficient inducement to such individuals to continue and extend their efforts. It will not be denied by any one that the best animals are the most desirable; and it seems equally clear from the multitude of ordinary, or even inferior animals which abound in our country, that our present common breeds do not furnish the best of the several kinds of stock. Our horses in general are miserable; our cattle little better; our flocks of sheep are more improved than either; but our hogs of the ordinary or common kinds are a disgrace to the name of porker. If, as some have asserted, there is more in keeping them in breeds, in having fine animals, we have certainly been very guilty in the treatment of our animals, or they would not have so sadly degenerated.

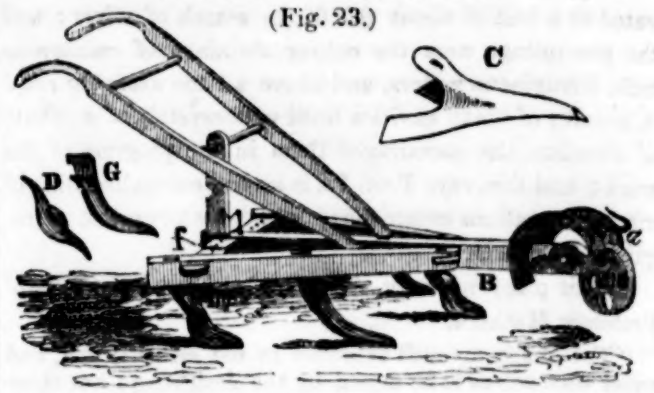
The truth is, to have good stock, we must have both good breeds, and good keeping. Good blood in a horse, will make a valuable animal in spite of some privations in the stable, but a horse must be well kept if we expect him to reach the perfection to which he is capable; a China pig will become corpulent on food that would hardly enable one of the common breed to avoid starvation; and a man who attempts to fatten a pen of the last, will frequently suffer loss from the operation, while his neighbor with a dozen of the Berkshires, is realizing cent per cent from feeding. Scarcely less is the difference in early maturity, size, and ease of fattening, in the improved cattle and the original stock of our country. From this stock has been raised some beautiful and valuable animals, but in breeding from these, it was found these qualities were purely accidental, the progeny being as unlike the parent as possible. This difficulty is obviated by breeding from animals in which the good qualities sought have become constitutional, or part of the type of the breed, and therefore not liable to be lost or sunk in the progeny.

In inviting the attention of farmers engaged in the raising of horses to the fine animals owned by Mr. Allen of Buffalo, Mr. Weddle of Ontario, Mr. Fordon of Seneca, or Mr. Robinson of Palmyra, of which notices have appeared in the advertising department of the Farmer, we are confident we are consulting their own interest, and the general interest of the country. The beautiful cattle, cows and bulls lately sold by Mr. Weddle, and widely scattered in the western district, with those of Mr. Allen, cannot fail, if the opportunity is embraced as it should be, to add materially to the value of stock in this region. Western New-York has been too negligent in this particular. Unrivalled as our territory is in the production of wheat, the ease with which our fields can be covered with clover, or roots, proves that if we please, we may add the raising of stock to our other resources, and we doubt not that in many places this is the most profitable use to which our lands can be put. Beef is becoming yearly an article of more consequence in our markets; and it now depends on our farmers to say whether they will adhere to a breed of cattle that requires to be kept three or four years to weigh a thousand, when for a trifle of expense they can be put in possession of one, that not unfrequently exceeds that amount when two years old. Then there are Mr. Allen's and Mr. Bement's valuable Chinese, Tuscarora and Berkshire pigs. It is idle for a farmer who possesses the means, (and what farmer does not?) to imagine he is doing as well as he can, or as well as he should, unless he has some of these animals to devour his slops, eat his grain, and be converted into his pork.

There are numbers of other individuals engaged in the same good work, besides those we have named, but we have particularized these, since from their notices in the Farmer, the kinds and qualities of their several animals, and their places of residence can be at once ascertained by the farmer.

Cultivator or Horse Hoe.

(Fig. 23.)



The following description of Bement's "last and best" Cultivator, a drawing of which is given above, is from the 3d vol. of the Cultivator:

It has been much improved of late in manufacture as well as by the addition of new fashioned points or shares, which render it a very useful implement on the farm, and will be found particularly useful in the beet culture, which is now very justly engaging the attention of some of our enterprising agriculturists. With the aid of the Horse Hoe and Drill Barrow, the cultivation of the beet may be made as easy as that of corn or potatoes.

The Horse Hoe is useful for stirring the soil in the intervals between rowed crops, especially corn, potatoes, turneps, beets and beans.

Respecting the construction of Horse Hoes, it may be observed, that soils of different textures will require shares of different forms, according to the hardiness or tenacity. The number of hoes in hard soils require to be diminished; in a hard clay soil, one of the triangular hoes in the centre, (C,) and four of the coulters in the wings, will often be all that can be made to enter the soil.

In using this implement, the operator should always consider whether he will produce more benefit by merely cutting over or rooting up the weeds, or by stirring the soil; because the hoe suited for the one purpose is by no means well adapted for the others. In the former case, flat or triangular shares are to be used; in the latter, coulters are much more efficient, as they will enter the soil and stir it to considerable depth, thus greatly benefitting the plants by admitting air, heat, dews, and rain, and by rendering it more permeable by the roots.

It should be introduced between the rows or drills as soon as the plants appear above ground, and the operation should be repeated at intervals till the crop is thoroughly cleaned.

The clevis on the point of the beam is so constructed, that the draught may be regulated so as to keep the wheel firm on the ground, thereby steadying the machine, and the depth is regulated by the wheel, and may be varied from two to six inches. The triangular hoes (C,) cut the bottom of the space between the drills completely, and should circumstances require, the hoes may be replaced by the coulters, which will open and pulverize the soil as well as rake out the weeds. The wings expand so that it may be regulated to any required width from 16 to 30 inches.

When the earth is required to be taken from the plants, as is the case with the ruta baga when quite small, the half shares (D,) are to be used, turning the mould boards to the centre, and the double ones substituted when the earth is to be replaced.

The coulters (G,) are useful for scarrifying old meadows that have become turf-bound. The double mould board shares are also useful for covering peas and oats instead of the plough or harrow.

A supply of the above, will be kept for sale by Messrs. "Reynolds & Bateham," at the Rochester Seed Store, at ten dollars and seventy-five cents.

Sheep Husbandry.

The following is an extract of a private letter from a gentleman well qualified by his long experience in the business, to aid South-hill and L. A. M. in enlightening our readers on the Management of Sheep, and we hope he will assist them in the "thorough investigation" which he desires:

"I see that my friend South-hill and L. A. M. have commenced writing for your paper on the subject of sheep, a subject which I should like to see thoroughly investigated; for I think that there are not only unpardonable offences committed against this useful and interesting animal, but that there are also great prejudices and ignorance existing. Many of our farmers seem to think that sheep can live on little or nothing, and when they find their sheep dying, they are apt to lay it to some foreign breed, when in fact the fault was in the care and management."

THE PROSPECT.

'Did you ever know so backward a season ?' is a question frequently asked, and in a way which strongly implies the belief that such a spring of the year never before existed. Now we think every man who does not trust entirely to his memory, but make a memorandum of the principal events of each season, will find nothing in the present very singular or at all calculated to alarm. The blossoming of the cherry, pear, peach, plum, apple, &c. is later than in most years, but our journal shows that late blossoming is almost invariably connected with abundance of fruit; and that very early blossoming, by exposing the tender fruit to the cold storms or frosts that in our latitude rarely fail of occurring between the 10th and 20th of May, is indicative of a scarcity of fruit in the fall. The weather has been very favorable for a heavy growth of wheat, and the only danger at present to be apprehended, is, it will be so luxuriant as to lodge badly. Spring wheat, except on very wet and tenacious lands, appears well, as does barley and oats. Indeed with the single exception of corn, we do not remember a year when the prospect of an abundant harvest has been more apparent than the present. The extreme hot weather we have had for a few days past will have a good effect on the corn, and on land suited to its culture a good crop of the early varieties may be acticipated. Grass is coming forward rapidly; the frequent sains advancing its growth in a great degree: and the probability now is that one of the greatest yields of grasss we have known, will be given this year. The season has been admirable for the seeding of lands, and much less clover and grass seed will be lost, we apprehend, than is usually the case in stocking lands. The heavy rains of the latter part of May and the forepart of June have furnished farmers with additional evidence of the necessity of draining lands, and we hope the monition will not be disregarded. On the whole, the prospect is decidedly favorable; and instead of complaints or forebodings, should be gratitude and thankfulness.

The State and Agricultnre.

It is not without feelings of regret and mortification that we compare the apathy and indifference with which the great and cardinal interest of agriculture appears to be regarded by the public men of New-York, with the enlightened public spirit, and active energy, that pervades the councils and measures of some of our sister states. Massachusetts, with but little more than a tithe of our territory; one fourth of our population; with a treasury destitute of the ample resources of our own; and a soil which in comparison with ours we are usually pleased to consider sterile and unproductive, has taken a series of measures that may, and probably will, take more money from her treasury to aid the farmers of the state in this single year, than New-York with her almost boundless means, has ever directly done for the aid of agriculture. The Geological and Agricultural surveys are going on with spirit and success; and her bounty on wheat will scarcely fail of stimulating her hardy sons to the production of large quantities of that most essential of grains. Massachusetts has chosen the true course. Her protective, is not one of exclusion but of production; from her system she derives a double benefit; she creates from her own labor and soil her bread; and is thus enabled to retain the money she would otherwise have expended, to be added to her active capital; and she will find that the other departments of manufactures and agriculture, will flourish in proportion to the facility with which bread can be obtained.

What has New-York done? We are compelled to answer, more in sorrow than in anger, almost literally nothing. Nothing to benefit the farmer or advance the agricultural interest in the least, if we except the continuation of the geological survey, and the granting charters to one or two county Agricultural Societies. The first of these operations was conceived in a noble spirit, and has been ably and worthily conducted; and in its results, if concluded in a similar feeling, will be a proud monument of talent and enterprise. It remains to be seen whether the granting charters for the establishment of Agricultural societies, without the fostering care and aid of the state, will accomplish the desired purpose intended by such acts. It appears to us there are serious mistakes in the course of our legislation on subjects of vital interest. We seem to lack the far-reaching forethought that can forego ephemeral notoriety, and overlook the plans and projects of to-day, for deeper and more enduring questions and matters of public policy. Let us first create wealth, and then devise ways and means for securing or expending it. We are fearful too many of our public men, instead of asking what effect such and such measures will have on the permanent prosperity of the country, rather enquire what the result will be to their political party. Such a state of things is wrong; it is derogatory to the standing and character of the state; it is placing New-York in the back ground, and making the Empire State tributary to those members of the confederacy, which, owing to natural causes, are her inferiors.

We have referred to this subject at this time, not so much for the purpose of attracting attention to what we are compelled to consider in part the delinquency of our public men, as to introduce to the readers of the Farmer the following editorial note and extracts, from the Kinderhook Sentinel, believing that they convey the opinions and sentiments of a vast majority of the Farmers of New-York.

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We have been kindly permitted to publish the following extracts from a private letter addressed to a gentleman of this place, by one of the most eminent agriculturists in the western district of this state—a man of clear hdad and discriminating judgment. There is no individual who has thought more on the subject on which he writes, or has labored more for agricultural improvement. He is therefore not only competent to give instruction and good advice, but his opinions, being the result of deep conviction founded on a full knowledge of the subject in all its bearings, are entitled to more than ordinary consideration. We trust that his suggestions will be received with all the attention which they merit. The legislature, we think, can scarcely do less than what is here suggested, before they adjourn: for surely the discovery of a remedy against the ravages of the wheat worm may be the means of saving millions to the state; and if the manufacture of silk can be made sufficiently extensive to supply our own wants, it would not only afford a profitable employment to the large portion of our population, but prevent the annual exportation of about ten millions of specie.

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"The analysis of soils is one of the most important things in agriculture, and yet how few are the individuals who are competent to perform this even in the most simple manner. We must understand the constituents of our soils, before we are prepared to correct their deficiencies; if we do not know the proportions of silicia, alumina, and lime contained in the fields we cultivate how shall we know what to add or diminish? The process is simple and should be more generally understood, where long cultivation or exhaustion of any given principle seems to lessen fertility, or require an alteration of the constituents of the soil.

"So it is with the formation and management of manures, than which there is nothing of more practical interest to the farmer. In this kind of information our farmers are wretchedly deficient, and schools where these principles can be taught, and inculcated, should be considered of the first consequence; and I am unwilling to believe that the present legislature of the state will separate without some measures that shall supply the deficiences, and by the adoption of a judicious system of distribution of the public money, give a new and lasting impulse to agriculture.

"Two measures have been brought before the legislature the present session, that I consider of peculiar importance, to the welfare of the state; and which, if they can be carried into effect, will, I have no doubt, be productive of the best effects, even should there nothing farther be done to meet the wishes of the farming interest:—I allude to the offering of a bounty for the discovery of a preventive to the wheat worm, and the giving of a bounty for the *domestic* manufacture of silk. I am one who deprecates the existance of those overgrown manufacturing establishments that form immense hotbeds of vice in the old world, and destroy physically and morally the thousand of the young that the ignorance, poverty, or avarice of their parents consign to their walls. Give me the village school, the ramble in the fields, the healthy, playful clime of the mountain side, the wild gambols in the pure air, as the places to rear young Americans; a course that shall give sound minds in sound bodies, and a race of men and women alike removed from the enevating influence of luxury and wealth, and the debasing coarseness of unlettered barbarism. The domestic manufacture of silk in my opinion promises best to unite exercise and labor; the pleasures of the open air and the stimulating reward of profit; the promotion of virtuous and industrious habits, with a spirit of enquiry; of any employ ment for the young that has yet been proposed. Of the necessity of arresting, if possible by human means, the ravages of the wheat worm, I need not say a word to you; as you have undoubtedly felt its effects tenfold more than we have in this district; but perhaps our turn is to come; and if the production of wheat should be rendered as difficult in the valley of the lakes, as it has been in that of the Hudson, the prosperity and finances of the state would receive a severe blow.

"The three grand measures that agriculturists demand, and the interests of the state require, are an agricultural school or schools, a law making an appropriation for county societies, and a bill authorizing the establishment of experimental farms by associations for that purpose; and no party cabals, or sectional prejudice should be allowed in the least to interfere with these things. They are for the whole state, and so they should be treated. In presenting their wishes to the legislative body, farmers should be firm, respectful, and persevering. We have a *right* to be heard, and if united in our efforts, and prudent in our measures, we must eventually succeed.

Application of Lime.

We shall now conclude our remarks on lime for the present, by suggesting some precepts to guide the farmer in its application. From experience it is found that all soils may be improved by mild lime, and ultimately by quick lime, which do not effervesce with acids, and sands more than clays.

A practical and experienced farmer says: "That when lime is designed as an amendment or permanent alterative, it should be previously exposed a long time to the air to render it mild or air-slacked. No choice of season need be observed in spreading it."

When the soil contains undecayed vegetable matter, quicklime will always improve it, hence it possesses peculiar efficacy in fertilizing all *cold* soils, such as low meadows and peats, which are often unproductive through the very exuberance of their undecomposed vegetable remains. It is, hence, a great mistake to apply lime to a soil destitute of vegetable matter; and every proper means should be adopted to secure vegetable matter in necessary quantities before lime be administered. The most effectual method of mingling the two materials in right proportion, is to mix up, or incorporate the lime in the soil by a summer fallow. By this process it will come in contact with a mass of green and decaying herbage, which it will soon change into a proper nutriment for a future crop. When lime is mixed with a soil containing no decomposable ingredient, it will retain its caustic and burning action, and prove very hurtful to the future crop. Still there remains a remedy to correct this evil—undecayed vegetable substances should be immediately applied. Wheat or rye straw, or long manure, is well calculated to rectify the caustic lime. When soil contains much vegetable manure already *soluble*, or so reduced as to afford nutriment to young growing plants, the aplication of quicklime is almost unnecessary—it should be wholly avoided.

The experience of the use of lime, as a manure, seems to suggest the precept, that quicklime should be administered as early as possible after being burned; or when that is impracticable, it should be preserved closely excluded from the air.—*Practical Farmer.*

Wheat and Maple Sugar.

The Assessors of the town of Chesterfield, in preparing their valuation for the present year, have ascertained that the wheat raised in the town the last year, amounted to eleven hundred and six bushels; and that there has been manufactured from the maple, in sugar and molasses, equal to thirty-nine thousand pounds of sugar. The writer of this would suggest the propriety of a bounty upon the manufacture of maple sugar. For is there a tree that can be cultivated for the ornament of our road-sides and villages, that affords a more luxurient foliage or plesanter shade than the sugar maple? And would not the encouragement that is now given for the best sugar be sufficient to induce the country generally to substitute the maple instead of any other, both for the luxuriance of its foliage during the summer, and the delicious sweet it would afford in the spring.—*Hampshire Gazette.*

Silk Machine.

The Messrs. Whitmarshes have just put up, at the Village Silk Factory, a beautiful machine for manufacturing watch and other narrow ribbons, and shalloon. We have a specimen of the latter, the first that was run off, and the ladies, who are judges in such matters, pronounce it to be excellent. It is a new application of machinery, constructed under the direction of a gentleman in the employ of Messrs. Whitmarshes.—*Hampshire Gazetts.*

The mind is like a trunk; if well packed, it holds almost every necessary thing; if ill packed, next to nothing.

COMMUNICATIONS.

Different Systems of Farming.

Mr. Tucker—In the management of our temporal affairs, whatever presents itself to our minds in the most clear and distinct manner, as best calculated to promote our interests, we embrace the most cordially, and pursue the most thoroughly. The operation of this principle is manifested in all the events and pursuits of life. And if the question should be asked, 'Why is it that men do not universally adopt the most approved and enlightened systems in the management of their different avocations,' the answer must evidently be, that from want of proper information they are not equally convinced, by a clear and distinct perception, of the superior merits of any system but their own. And in no other business is the practical operation of this principle so manifest as in that of farming; where a great diversity of systems leads to as great a variety of results.

My purpose is to show that farming, in its great fundamental features, is one of the plainest and easiest things in the world, if we but take hold of it in the right way.

Let us first look at the different systems of farming in vogue among us. The longest tried, and most venerable, is that of *Skinning*, whereby the farm and the farmer become impoverished together. This system has yet many advocates in the land, who settle down on good soils, work it hard, and wear it out; then sell cheap, and go to the *west* and buy cheaper and better soils, wear that out, pull up stakes again, and again push off to the west. By this system, new countries are cleared up and settled, and a broader scope given to population; fulfilling the requirements of Scripture, "be ye fruitful, and multiply and replenish the earth." Another system, of a somewhat more modern date, is, *Let well alone*. This system is an innovation on the former,—it keeps the farm and the farmer in *statu quo*, or just as they were; upon the idea, that attempting to improve nature is warring against Providence—it keeps society stationary, as offering no inducements to emigration; the requirements of life are not multiplied, as wealth is not amassed and luxury induced; and population is kept uniform and steady. Another and still later system of farming is, *Improving;* whereby the soil is renovated, the crops more abundant, and the farmer is enriched. This is the latest innovation that has been made upon the old system of *Skinning*, and is antipode to it. It finds but few advocates yet, although its advantages are so superior; as it is hard to prove to men that they are and always have been blind. Men naturally incline to pre-conceived opinions, and do not willingly forsake them, as they are reluctant to acknowledge themselves in error; and their minds are consequently hardened against new impressions, however valuable, and advantages are forsaken which might have been easily secured. But with all man's attachment to old ways and notions, the *Improving* system of farming is gaining ground every day. It is true that this system is somewhat in advance of the times, as the ignorance of the mass of farmers does not permit them to see and appreciate the correct principles upon which it is based. But as its utility and soundness are every day more and more developed and extended, its advantages become more and more apparent; and if its *theory* be not understood, its results being visible, its *precepts* will be adopted and applied.

I have said that farming is one of the plainest and easiest things in the world, if we but take hold of it in the right way; and having exhibited the different systems, *Skinning*, *Let well alone*, and *Improving*, with a brief view of their relative merits, it must be apparent that the latter is the best system of farming, and the right way of taking hold of it. Its advantages over the other systems, I have said, were, it improves the soil, enlarges the crops, and enriches the farmer; it moreover diminishes the relative labor, and affords support to a more dense population. These are advantages of no ordinary magnitude, peculiarly resulting from this system.

The principle upon which the *Improving* system of farming is based, is simply this—so managing the soil as to make it afford to the plants grown upon it, a full and sufficient supply of nourishment, to bring them to the highest degree of perfection; and so managing the plants cultivated, as to keep them in the most healthy state, that they may draw from the earth and the air the greatest amount of nourishment they can elaborate. This is the *Alpha* and *Omega* of this boasted and book-taught system. As different soils and crops require difference of management, I shall, for the purpose of illustrating the principles of this system, barely give a general outline of its features, upon which a fair estimate can be made with regard to its detail. First, and most important, the soil should be well enriched with *barn-yard manure;* whereby it will be made more friable, more pervious to the atmosphere and the roots of the plants, and less subject to be injuriously affected by drouth and heavy rains;—manure, besides, affords the most permanent and important supply of nourishment to plants; and should be thoroughly incorporated with the soil. Another peculiarity of this system is *rotation of crops*, whereby the different constituents of the soil are all and equally taxed, and none of its energies left useless and inactive—this is an important consideration. Where the soil can be adapted to it, the root culture should be a primary object, to the full wants and consumption of the farm stock, as affording the greatest profits in the largest amount of animal sustenance, and leaving the soil in a good condition for small grains. Clover is another important crop; it is next to barn-yard manure as a fertilizer and pulverizer of the soil, for which it should be ploughed under and permitted to rot. Other crops, as required, and adapted to the soil, following in rotation, with proper dressings of manure, will improve the soil, and yield golden harvests to the farmer—if he will go one step farther, and manage his crops as well as he has his lands. The plants cultivated should have the soil *all* appropriated to their use, by extirpating with the hoe, or otherwise, all weeds and other foreign plants, which, if permitted to grow, would absorb some of that nourishment from the atmosphere and the earth which would otherwise be taken up by the crops, in the more full and perfect development of their quality and quantity. As regards hoed crops, the surface of the soil should be stirred as often as practicable, but not so deep as to injure the roots; leaving the surface as near as may be, the same that it was when the seed was put into the ground. Nature having indicated the proper depth of the roots in the soil, it can neither be increased or diminished but to the disadvantage of the plant.

These general rules, acknowledged correct and important by all who have tried them, could they be reduced to general practice, would have a most salutary influence upon the farming interests, and upon the interests of every other class in society. These rules are simple and easily applied. Always keeping one purpose in view, viz: making your crops healthy, by attending properly to them, and giving them enough to eat, and the great end of agriculture is attained. It is true, that farming requires intelligence to conduct it with pleasure and profit, as what occupation does not? The science teaches us the way of forcing nature to shower her blessings upon us in greater profusion—it enables us to grasp the Cornucopia with our own hands, and to pour out its treasures into our own laps.

Pittsford, June 6, 1838. E. W.

Descriptive Catalogue of Turneps.

Mr. Tucker—As the cultivation of Turneps is beginning to receive that attention in this country which its importance very justly demands, we thought it would not be unacceptable to your readers, to give them a brief descriptive list of those kinds which are most approved in other countries, and the seeds of which we have just imported, in order that farmers may decide by experience, which kinds are the most profitable, or best adapted to this climate.

Turneps best suited for Field Culture.

Ruta Baga or Yellow.—This variety is too well known to need any description. It is considered the most productive, hardy, and long-keeping variety of all the Turnep family, and at the same time the most nutritious and best kind for cattle. There are several varieties of the Ruta Baga, differing more or less in form, size or color. The kind most esteemed is the *Purple Top*. The roots of this are of large size, regular form, yellow beneath, and a reddish purple color above ground. The seed of this, as well as all other kinds of turneps, is very apt to degenerate when raised in this country, consequently we prefer to import our supplies from England.

Dale's Yellow Hybrid.—This is a new variety, a hybrid between the Ruta Baga and the White Globe, and partaking somewhat of the character of both. The root is long, yellow and firm, of large size, but not very regular form. It is of quick growth, and (like the following) on this account it may be sown considerably later than the ruta baga, for which it is a good substitute.

Yellow Bullock, Yellow Scotch and Yellow Aberdeen.—These three, although considered distinct varieties, do not differ very materially in any respect. The roots are mostly oblong, of good size, yellow color, and firm texture.—They are more nutritious, and keep better than the white kinds, and are of quicker growth and more tender than the ruta baga.

White Globe, or Large White Flat.—This is more generally cultivated, both in this country and in Europe, than any other white turnep. Its true form is globular or a little flattened, but like most others, it is very much affected by the kind of soil in which it is grown, and the degree of care which is used in raising the seed.

Large White Norfolk.—This, we believe, is the largest of all turneps, and although not as firm, or as hardy as some others, it is certainly deserving of cultivation. They are of quick growth and rather irregular oblong shape. We had several specimens of this kind the past season, which weighed from twelve to eighteen pounds each.

Long White Tankard.—This variety has long roots growing about half above ground. It is of luxuriant, quick growth, and much cultivated for sheep in some parts of England.

Red Round, or Red Top.—This is a handsome turnep, of medium size, globular form, fine texture, white beneath and a deep red color above ground. It is said to succeed better than any other variety, on light, dry soils, on which account it may be found valuable.

Turneps suited for Garden Culture and Table Use.

Most of the preceding kinds are more or less cultivated for table use, but except when young, and of rather small size, they are much inferior to the following:

Early White Flat Dutch.—This variety is of very rapid growth and most suitable for early sowing. The roots are excellent for the table when young, but become pithy and inferior when full grown. It is often cultivated as a field crop in this country, and called *English Flat Turnep;* but for this purpose, it is far inferior to the Globe, or the Tankard.

Early White Garden Stone.—This also is an excellent turnep for the table, but not as suitable for early sowing as the preceding, as it is apt to run to seed in hot weather. It is of a round form, firm texture, quick growth, and keeps well if not sown too early.

Early Yellow Dutch.—This is a small round turnep of excellent flavor, and much esteemed for summer and autumn use.

Yellow Stone.—Rather larger than the preceding variety, and better adapted for late sowing and winter use, being more hardy and firm in texture.

Yellow Malta.—When not too old or overgrown, this is the most delicate and delicious of all turneps. The root is of a bright yellow color, very flat, having a peculiar hollowed or concave bottom, with a very small tap-root.

REYNOLDS & BATEHAM.

Rochester Seed Store June 23, 1838.

The Sugar Beet for Hogs.

Mr. Tucker—Much has been said upon the subject of cultivating the Sugar Beet for the purpose of making sugar. I think, from the little experience I have had, that the root and top are more valuable for fattening hogs than any other cultivated root, being very nutritious. The sugar beet is rapid in its growth, and when planted early in the season, will be found to be about six weeks earlier than any other root which is used for fattening swine. I

have usually cut the roots and tops suitable for feeding and then boiled them; they make good food without the aid of provender, and when boiled with potatoes or apples, the swine will eat the tops and roots of the beet first. By depending upon the beet, the farmer might begin to fatten his swine six weeks earlier, and if he chooses can add an equal quantity of windfall apples. The beet will sweeten the apples, and the swine will improve very fast.

N. Blandford, Mass., 1838. L. G.

Protection of Cucumbers, &c.

Mr. Tucker—I noti.d in the last number of the Genesee Farmer, several methods of preserving melons, cucumbers, &c. from the depredation of various insects, which generally effect more or less destruction among some of our best garden crops. I hit upon a plan this spring, which, though simple, will prove highly beneficial in protecting them from the attack of the divers insects which so frequently destroy them. It consists in covering each hill with a wooden frame, about four inches high, and ten or twelve inches square, with a pane of glass of the same diameter suited in the top. They should be covered, if convenient, as soon as planted.

I have found by experiment that those covered in the manner above alluded to, would be greatly accelerated in their growth, and remain uninjured; while those by the side of them, which were not covered, would be almost entirely destroyed. J. McK******, Jr.

Livingston, Columbia Co., June 11, 1838.

To prevent the yellow bug from destroying vines, wool, and that which is of no use except for manure will answer well, and is believed to be the best preventive that can be used. It should be made into thin bats, and as soon as the plants appear spread over them. It not only forms a net through which the bug cannot penetrate, but is offensive to them, and will forward the growth of the plant by protecting it against cold winds and damp nights. Tow will answer, but is not as good. C. L.

Cope's Straw Cutter.

Mr. Tucker—Allow me to bring to your notice a new agricultural implement of great value; "Cope's Improved Horizontal Straw Cutter;" a Tennessee invention; patented two years ago, and just introduced into Georgia. No other cutting machine approaches it in simplicity, strength, constant good order, *utility* and comparative *cheapness.* Willis' Straw Cutter, though itself a good machine, does not cut more than half as fast; is more liable to derangement, and costs nearly thrice as much as I suppose Cope's would cost in your part of the country. Owing to the peculiar state of our agriculture in Upper Georgia, this machine is destined to effect much more change among us than you could, at first thought, think of attributing to a mere straw cutter. W. M'K.

Lexington, Ga., May 25, 1838.

Hoof-Ail.

Mr. Tucker—In our country a cure for the "hoof-ail," or something very like it, is effected by scarifying the limb when the affection first appears with a straw rope, and then applying spirits of turpentine. This has cured very desperate cases. J. W.

Chatham, U. C., May 19, 1838.

To the Editors of the Genesee Farmer:—The verses headed "The Ploughman," in a late number of your paper, with the signature of your correspondent "A. F. G." and hence by some supposed to be original, is an old acquaintance. W.

The verses alluded to were sent to us by A. F. G. who informed us that *he* wrote them "many years ago."

Worms and Bots in Horses.

"When worms breed in horses, it arises from weak digestion, or a vitiated appetite. To cure a horse of bots:

Take two drachms of quicksilver; half an ounce of venice turpentine, rub the quicksilver till no glistening appears; then take an ounce of aloes, a dram of grated ginger, thirty drops of oil of savin, and syrup of buckthorn enough to make the whole into a ball.

One of these balls may be given every six days, with the usual precautions with regard to mercurial physic: And the following powders intermediately:

Take powdered tin and Æthiops mineral, of each one ounce; and give it every night in a mash, or in corn.

These medicines, or any of the various preparations of antimony and mercury, should be continued several weeks together, in order to free the animal entirely from these vermin."—*Bartlett's Farriery.*

Manure—Green Feed—Turneps.

Before farming can be rendered what it may be, and what it ought to be among us, an important revolution must take place in the farmers' management and cultivation. Every observing and intelligent farmer knows that manure is the great means of success; that without it, success in our old lands is not to be expected; and that with it our farms, if they do not produce as much in quantity, will often make a very much larger pecuniary return than three times the quantity of land in the fertile regions of the west. The market gardeners near the capital perfectly appreciate the value of manure; and pay for it prices, which are absolutely astounding. We have known five and even six dollars per cord given for manure, which the farmer had then to transport six and even ten miles, at an expense before it could be placed upon his fields, certainly not less than four dollars, making the total cost of the manure nine or ten dollars per cord. Yet even in spite of this enormous expense, it is a common, and we believe a well founded remark, that the most successful and thrifty farmers in the vicinity of Boston are those who are most liberal in the purchase of manure. We believe that a great deal of this expense might be saved to these farmers by providing with more care and judgment for their own wants; and that the farmers in the interior, who are too remote from the city to supply their wants from that source, ought to make it a great object of their study and operations to create as large a manure heap as possible from sources within their immediate reach, or within their power to create.

On another occasion we shall go into this subject much more at large. Our present design is to point out one means or source of increasing the manure heap, which can and should be provided for at this very season; and that is the cultivation of green and succulent vegetable crops for the feeding of their stock.

It is to late to think of much else than turneps; the common white turnep, the yellow Aberdeen, and the Swedish turnep or ruta baga. Our winters are long and our cattle suffer much from being kept so long and constantly upon dry fodder; corn stalks often musty and half rotted; and coarse hay of a very inferior quality, which no person will buy; and which the cattle must eat or die just as they choose. We are perpetually hearing farmers boast how poorly and how cheaply they keep their milch cows and their young stock through the winter; but much as they plume themselves on their skill in this matter, we have never been able to bring ourselves to admire either their good judgment, or their humanity; to say nothing of the justice or rather the injustice, the absolute immorality, of half-starving so useful and beneficient an animal as a cow, who contributed so liberally to our support and comfort. Besides it is in truth the worst of all economy. A good cow will, in any situation, where milk is worth but two cents a quart, and skim milk is almost always worth as much as that to be given to swine of a proper and good kind, more than twice pay for the best keeping that can be given to her. A good farmer ought to be ashamed to keep a poor and worthless cow; and a cow which is well kept through the winter is nearly half kept through the ensuing summer. A cow that comes out in the spring half wintered, poor, and consumptive for want of sufficient food, will evidence the bad effects of such miserable and disgraceful husbandry all the ensuing season. It is commonly said that dry cows may be kept on almost any thing, which will barely enable them to stand upon four legs and hold body and soul together, if the poor things have any souls; but how does the cow constitution differ from the constitution of any other animal; and is it not obvious that any animal in a bearing condition particularly requires at such times sufficient and the most nutritious food?

No man, then, making any pretensions to the character of a farmer, ought to suffer himself to go into the winter without a most ample supply of green succulent vegetables for his stock. Beets, parsneps, carrots and potatoes, are all good; but turneps are raised with more ease than almost any other vegetable; and it is not too late, and will not be too late even through the month of July to plant some kinds of turnep for the winter consumption of live stock. Every farmer who keeps a horse, a yoke of oxen, and six cows ought to raise at least four or six acres of ruta baga or common turnep. We know that this will frighten many farmers and make them open their eyes almost to an extent as large as the turneps, which they commonly grow, who have always thought it enough to plough up a piece of land by the road side or some corner of a field, as big as their wife's apron, where they have yarded their cows; and who feel great self-complacency in their extraordinary husbandry, if they perchance should have the mighty quantity of fifty bushels of white flat turneps to put into their cellar in the autumn. Instead of this, many a farmer ought to have his one, two, three and four thousand bushels to put in his stores; and such a capital heap for his winter consumption, as to make his cows and his oxen think as well of him as his neighbors will be compelled to think, when they shall see how his stock came out in the spring. We hope the time is not distant, and that our eyes will be blessed with the sight of it, when such practices will be general, not to say universal.

What would be the consequence of such management it is easy to predict. Our horses, instead of being those miserable, jaded, galled, Rosinante looking forms, which they now exhibit, suitable only as one observes to make lanterns of, if you could contrive to get a lighted candle into their mouths, would be round, sleek, strong, and spirited animals, fit for pleasure or for labor, and not require to be driven 'woman fashion' by the bit with both hands holds of the reins. Our oxen would be in high condition, able to labor, and always ready for the butcher when we saw fit to consign them to his disposal. Our young stock instead of being that lean, puny, constantly degenerating stock now but too commonly seen in our barnyards, half starved upon orts and refuse hay would double their value, and our cows would in most cases actually treble their produce; and make it not difficult to make butter little inferior to June butter in the midst of winter; to what profit and advantage, every farmer might easily ascertain by bringing such butter made and put up in the best manner, to Boston market in the months of February and March.

We advise then most strongly our brother farmers the cultivation of green crops for their winter consumption. Few farmers are ignorant of the mode of cultivating the common turneps. We advise however that they should be sown in drills from two feet to twenty-seven inches apart, that the cultivator or plough may be constantly used among them. It is scarcely worth while to attempt their cultivation, unless they are to be well tended. These turneps may be sowed any time in the month of July; and if you have no other land upon which to place them, then turn up a piece of green sward, being careful completely to invert the sod, and to cultivate the field without breaking or disturbing the sod.

The Ruta Baga requires a longer cultivation. We have raised good crops on turning over a clover ley after the grass was cut, and sowing them the first part of July. In this case we obtained from three to four hundred bushels. But it would be better to sow the plants in a seed bed in your garden, and when your field is ready for setting them out transplant them. After your land is thoroughly manured and prepared, then furrow it out at a distance of 27 or 30 inches apart; then take up your plants, and having dipped the roots in water lay them in the furrows, being careful to select the best plants only, at a distance of a foot apart; and then cover them with a plough, we mean of course the roots only, letting a hand follow with a hoe to set up those which are too deeply buried, and to secure those which the covering has not reached. There is very little risk that they will not live; you can scarcely kill them unless you lay them on a stone, where they cannot reach the ground—and the advantage of this method is that you choose your time to the greatest advantage for preparing your land; you save time by getting your plants forward before your field is prepared; you have an opportunity of selecting your best plants; and all the trouble of thinning out your plants is saved, as you set them at the distances, at which you determine they shall stand.

But the great objection will be, we have not manure enough;—begin then with what you have—otherwise you never will have enough. The very way to get manure is to increase the succulent food for your stock. No article of feed, which can be given to stock will produce such large secretions of urine, and where straw and mud are bountifully supplied, enable the farmer to make so much manure, as turneps. Be content then, at first, with a small yield; but take the first step—go on in the cultivation; get what you can; use all you can get; the more turneps you raise the more manure you will have; the more manure you have, the more turneps you can raise; the more turneps you raise the more stock you can keep, the more butter, beef, mutton and pork you will make; the more produce the more money; the more money the more improvement and cultivation; the more improvement and cultivation, the more production; the more production the more wealth. Now "gee up Dobbin." Don't say I can't. If that word is in your vocabulary, out with it; and never suffer it longer to disgrace your husbandry. The creation of manure is the creation of wealth. The manure heap is the farmer's gold mine. Increase it—increase it. Often it happens that the time occupied in going to the city to get a cord of manure, which costs the farmer ten dollars in the end, to say nothing of the vexations which always attend it, would, from materials and means within his own reach at home, enable the farmer to make three cords in his premises. Think of this, Brother Jonathan.—*New England Farmer.*

Be industrious and frugal, and you will be rich.

Cutting Timber.

Chestnut Timber for posts and rails is said to be the most durable if cut, split and peeled in the month of June or when the bark strips most readily. The reason assigned is that the sap, though perhaps more abundant, is less gummy and discharges or evaporates more perfectly than it will at any other season of the year; hence the timber shrinks more, seasons better and is more solid and tough, as is well known by those who have taken observations while cutting it, and becomes perhaps doubly valuable as a fencing material over that which is cut when the bark will not peel and in which the glutinous sap remains a long time fermenting and partially at least decomposing the fibres of the wood.

The expense of chopping rails is but little increased by being performed in June rather than January, and if after being split and peeled in the woods, they are laid so as to season readily—i. e. not flat upon the ground beneath bushes and shade,—the gain in expense of hauling the dry rails over the expense of hauling the green rails, which work in many cases is necessarily and in perhaps all cases more conveniently done in the winter, is much more than the loss in expense of cutting in summer.

It is believed that many farmers are not aware of the serious loss which they sustain in the usual practice of cutting their fencing timber in the winter and leaving the bark on until it rots off. Peeling the bark off in the spring, which can be done if taken at the right time, is a partial remedy for the evil of cutting in the winter, and is only a partial remedy; the loss is still great, a loss not only to the individual but to the public in rendering more scarce, a necessary article, already sufficiently difficult to be obtained.

It is a well known fact, that a chestnut log after laying a few years with the bark on, will split much more free and easy than the same log would in a green state when first felled, although the timber, excepting the outside, appears to the eye equally sound as before, and the same is true of small timber. This difference arises from the partial decomposition of the fibre which has now become brittle and tender; and for all useful purposes, even for fire wood, the timber has lost much of its original value. The contrary of all this is found to be true when the timber is cut and peeled in the early part of summer and properly seasoned.

The seasoning of posts is perhaps more essential to their durability in the ground, than the time of cutting, and they can hardly be well seasoned without peeling.

Fifty cents paid for a timely cut and well seasoned chestnut post, to set in an ornamental fence where valuable materials and expensive workmanship are bestowed in the construction and finishing of the fence, is doubtless a more economical expenditure of money, than five cents paid for the same post, if cut in winter and set with the bark on. In either case the posts will make but a small part of the whole cost of the fence, while it is believed that the seasoned post will be as sound at the end of fifteen years as the unseasoned will at the end of ten years, as in a like proportion according to the nature of the ground in which they are set. And a fence will usually remain good while the posts are firm and sound, but the other material are of comparatively little value to take in pieces and reset after the posts have decayed. Hence the real difference in the value of the posts is much greater than would be thought at a hasty glance, but is easily estimated where the facts existing in the case are known. Experience has given results no less decisive in favor of seasoning fence rails in the shortest time and most thorough manner.

With farmers in general it is esteemed much more convenient to cut fencing timber in winter than it is summer, although estimating labor at its cost but little is saved in the actual expense; and it is doubtless from this impression of *convenience* that from year to year they are reminded in some of the newspapers that February or March is the proper time for doing this business. This advice is undoubtedly given with the best intentions, and may perhaps be good for some kinds of timber or some other climate, but for chestnut timber and indeed manyother kinds in New England it is most certainly out of place and contrary to fact so far as their durability is concerned. Even the White Birch, one of the most perishable tenants of our forests, by peeling and seasoning in early summer is found to resist the effects of atmospheric influence and retain its strength for a number of years. The same is true of White Pine saplings, and probably of most if not all other trees growing in New England.

Every organized body, whether vegetable or animal, when deprived of the principle of life, seems to possess within itself in a more or less active state, the principle of dissolution or decomposition, a wise provision of nature to supply through earth or atmosphere nourishment to living bodies. This inherent principle or quality is evidently weakened in many cases by drying or evaporation and apparently does not regain its former activity by a return of the original amount of moisture, and it is to neutralize this principle that the thorough seasoning of fencing timber which summer operations alone can give, is recommended. —*Northampton Courier.*

The Raising of Poultry.

The annual mortality among poultry is a subject of general regret; but as we believe that preventive means may be used which in a great measure will save a large majority of those which otherwise would fall a sacrifice to those diseases which usually prey upon the feathered tribe, we will briefly suggest a few practical rules which, if adopted, we believe will answer the desired object.

1. All young chickens, ducks, and turkeys, should be kept under cover, out of the weather, during rainy seasons.

2. Twice or thrice a week, *pepper*, *shallots*, *shives*, or *garlic*, should be mixed up with their feed.

3. A small lump of *Assafœtida* should be placed in the pan in which their water is given them to drink.

4. Whenever they manifest disease by the drooping of the wings or any other outward sign of ill health, a little assafœtida broken into small lumps should be mixed with their feed.

5. Chickens which are kept from the dungheap while young seldom have the gapes, therefore it should be the object of those who have charge of them so to confine the hens as to preclude their young from the range of the barn or stable yard.

6. Should any of the chickens have the gapes, mix up small portions of *assafœtida*, *rheubarb*, and *pepper*, in fresh butter, and give each chicken as much of the mixture as will lie upon one-half the bowl of a small teaspoon.

7. For the *pip*, the following treatment is judicious. Take off the indurated covering on the point of the tongue, and give twice a day, for two or three days, a piece of garlic the size of a pea: if garlic cannot be obtained, onion, challot or shives will answer: and if neither of these be convenient, two grains of black pepper, to be given in fresh butter will answer.

8. For the *snuffles*, the same remedies as for the *gapes* will be found highly curative; but in addition to them it will be necessary to melt a little *assafœtida* in fresh butter, and rup the chicken about the nostrils, taking care to clean them out.

9. Grown up ducks are some times taken off rapidly by convulsions. In such cases, 4 grs. of rheubarb and 4 grs. cayenne pepper mixed in fresh butter should be administered. Last year we lost several by this disease, and this year the same symptoms manifested themselves among them, but we arrested the malady without losing a single duck by a dose of the above medicine to such as were ill. One of the ducks was at the time paralized, but was thus saved.—*Farmer & Gardener.*

To Destroy Sorrel.

Among the pests to which the farmer is subject, there is none more annoying or vexatious than *sorrel*. While, it exhausts the soil and impedes the progress of healthful and cleanly culture, it is utterly unfit for all purposes of food. It is however fortunate for the husbandman that there is a remedy. *Lime* is its certain destroyer. We say this from experience, having tested its efficacy the present season. We had a few acres infested with it much to our inconvenience: on a part of this we spread 66⅔ bushels lime to the acre, on the balance we spread 200 bushels of ashes. The *sorrel* on the limed part has nearly disappeared, while on the portion on which ashes were spread, it is as thick as ever. We believe that 30 bushels of lime to the acre, judiciously spread, would sweeten and neutralize the acids of any soil sufficiently to prevent the growth of this pest.—*Ib.*

Age and Size of Trees.

We notice in the May number of the Journal of the American Institute, an interesting article on this subject, —compiled principally from the writings of Michaux and De Candolle, a volume on Timber Trees, the Penny Cyclopædia and the Gentlemen's Magazine,—containing many curious facts, some of which we extract for the information and entertainment of our readers.

"The *Oaks* are among the patriarchs of Europe." In America there are no less than 29 varieties of the oak enumerated by Michaux. The white oak of the American forests is a much taller tree than the British oak; though its timber is not so hard nor so durable. "It is," says Michaux, "70 to 80 feet high, and 6 or 7 feet in diameter; but its proportions vary with the soil and climate."

The *Wallace Oak*, at Ellerslie, in Scotland, 3 miles from Paisley, was a remarkable object at the beginning of the 14th century, and must be at least 700 years old. Its branches are said to have covered a Scotch acre of ground. Many cases of oaks of extreme old age are recorded, some of which have been estimated at 1,500 or 1,600 years. The largest oak known in England, was called Damory's, in Dorsetshire, and was 68 feet in circumference.

The largest oak, and indeed the largest tree which we have seen in this country, is a white oak, on the estate of James Wadsworth, Esq., of Genesco, N. Y. The tree is from 24 to 27 feet in circumference at the smallest part of the trunk. Its age cannot be less than 500 years, and it must therefore have been a majestic tree at the time when Columbus discovered the western world. It appears to be still in a healthy and vigorous condition, and bears in its exterior no marks whatever of decay. It is by no means improbable that this tree exceeds in size, many both in Europe and elsewhere, which are recorded as of greater diameter.

The *Yew* attains a great age.—*Yankee Farmer.*

TEMPERATURE OF THE EARTH.—The miners have penetrated 1800 feed below the surface in the Cornwall mines in England. The heat inceseases with the descent. It has been found as high as 96°.

New Arrival of Turnep Seeds.

WE have just received from England a large additional supply of TURNEP SEEDS, among which are the following kinds:

Ruta Baga, or Yellow Sweedish,
Dale's Yellow Hybrid,
Yellow Bullock, Yellow Scotch,
Yellow Aberdeen, Red Round,
White Globe or Flat,
White Norfolk, Long Tankard,
Early White Flat Dutch,
White Stone, Yellow Stone,
Yellow Malta, Yellow Dutch.

☞ See descriptive list on page 198, current vol. Genesee Farmer. REYNOLDS & BATEHAM.
Rochester Seed Store, June 23, 1838.

Seed Buckwheat,

A GOOD clean article for sale low by
June 23. REYNOLDS & BATEHAM.

Red Clover Seed,

A FEW bushels just received, for sale by
June 23. REYNOLDS & BATEHAM.

Root Cultivation.

A LARGE supply of new and genuine Ruta Baga, Mangel Wurtzel, Sugar Beet and Orange Carrot Seed, just received at the Rochester Seed Store.
REYNOLDS & BATEHAM.
Rochester, April 21, 1838.

Drill-Barrows or Planting Machines.

A NEW supply of Robbins' Patent Planting Machines, just received at the Rochester Seed Store.
Also, a number of Merchants' Patent Drill Barrows. [See No. 18, current vol. of the Genesee Farmer.]
May 5. REYNOLDS & BATEHAM.

Farmers' Books.

NOTICES on the Sugar Beet, containing a description of the culture and preservation of the plant; also explanations of the process of extracting its Sugar. Price 25 cts.
A Manual of the art of making and refining sugar from Beets. Price 75 cents.
Cobb's Manual on the Culture of Silk.
Chaptal's Agricultural Chemistry.
The Complete Farmer, by Fessenden.
Fessenden's American Gardener.
A Guide to Orchardists.
Smith's Treatise on the Honey Bee.
A Treatise on Cattle.
Mason's Farriery.
Barnum's American Farriery.
Vols. 1st and 4th, Genesee Farmer, bound.
For sale by D. HOYT,
Rochester, May 26, 1838. Bookseller, 6 State st.

Fruit Trees for Sale.

THE subscriber respectfully informs his friends and the public, that he has for sale at his Nursery in Rochester, Monroe county, state of New-York, a large quantity of Fruit Trees, grafted and inoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL MOULSON.
April 15, 1838.
N. B. CASH will be paid for a few thousand two years old APPLE TREES.

Monroe Horticultural Garden & Nurseries, Greece, Monroe County, N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.
The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, Splendid Pæonies, Double Dahlias, &c. &c.
Also, a large collection of Green-House Plants, of choice and select varieties, in good condition.
Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired, delivered on the Canal, one mile from the Nursery, or at Rochester.
Orders for Mr. Rowe's Nursery received by the publisher of this paper.
Catalogues will be sent to every applicant, gratis, or may be had by calling at the office of the Genesee Farmer.
April 1, 1838. ASA ROWE.